

REMARKS/ARGUMENTS

The Office Action mailed September 27, 2007 has been carefully considered. Within that Office Action, claims 1-6 were rejected. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 1-6 are currently pending. Claims 7-12 were previously canceled without prejudice or disclaimer as being directed toward a non-elected patentably distinct invention.

The Applicants have hereby amended independent claim 1 above so as to give greater emphasis to some of the novel and patentable features of applicants' invention. The amendments are fully supported by the original disclosure and, thus, no new matter has been added. If the Examiner should disagree, however, it is respectfully requested that the challenged limitation be pointed out with particularity in the next Action so support may be cited in response.

Re the 35 U. S. C. § 103(a) Rejection:

The rejection of claims 1-6 under 35 U.S.C. §103(a) as allegedly being unpatentable over Makagon et al. (U.S. Patent No. 7,222,301) in view of Blum et al. (U.S. Patent No. 6,982,649) is respectfully traversed.

Applicants respectfully disagrees with the Examiner's contention that applicants' claimed feature of adaptively providing background noise suppression to reduce or substantially eliminate non-speech ambient background noise is "inherently disclosed within the process of recognizing speech." Processes used for suppression of ambient background noise and for discerning human speech from background noise have little or no relation to the specific processes used for the actual *recognition* of human speech commands. Conventional speech recognition programs/systems and input devices often require a noise free environment for

recognition programs/systems and input devices often require a noise free environment for proper “training” and subsequent operation. In particular, conventional voice recognition/enabling technologies are much too susceptible to errors induced by the extensive background noise that is typically constantly present in industrial mechanized-equipment/manufacturing plant and comparable power generation plant environments.

Applicants respectfully contend that a voice recognition/enabling technology that is operable in such very noisy environments and is able to distinguish/discern subtle human voice commands from loud ambient background noise is not taught or suggested by Makagon et al. or by any of the prior art currently of record.

Applicants appreciate the Examiner’s recognition that Makagon et al. does not explicitly teach or background noise suppression to reduce or substantially eliminate non-speech ambient background noise. (Office Action at page 3.)

Applicants respectfully disagree with the Examiner’s contention that “Blum in the same field of endeavor teaches background noise suppression to reduce or substantially eliminate non-speech ambient background noise.” The Blum et al. ‘649 patent is directed toward providing a floor display system that can detect the presence or activity of a person in the vicinity of the display to activate the generation of a visual display or audio output. The Blum et al. ‘649 patent is clearly *not* concerned with innovations in the technological field of voice-responsive computing/communications devices or the suppression/elimination of *non-speech ambient background noise* for the purpose of discerning human speech and commands. In fact, Blum et al. teach away from applicants claimed invention and ambient background noise suppression by using environment sound-sensing devices that specifically operate to actively detect non-speech

environmental noises such as that produced by a person walking near or toward the display. (See, for example, the Blum '649 patent at col. 7, lines 43 et seq.)

Moreover, according to the Manual of Patent Examining Procedure (M.P.E.P.), to establish a prima facie case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. M.P.E.P. 2141.

Applicants respectfully submit that there is no suggestion or motivation to modify or combine the Makagon and Blum references nor is there any reasonable expectation of success if the respective teachings of those reference were so combined. The floor display system of Blum would clearly not discern/recognize human speech commands and would not suppress *non-speech ambient background noise*. Consequently, it would not operate successfully (nor could it be expected to operate successfully) in Makagon et al.'s system to provide "a voice-responsive computing/communications device . . . providing speech recognition and adaptively providing background noise suppression to reduce or substantially eliminate non-speech ambient background noise", as set forth in applicants' claims. In addition, Makagon et al. and Blum et al. even if considered together fail to teach applicants' claim limitation of providing background noise suppression to reduce or substantially eliminate non-speech ambient background noise.

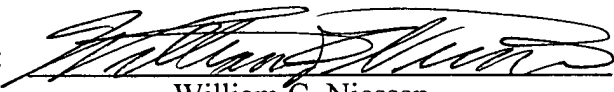
Moreover, the cited combination of the Makagon et al. and Blum et al. references fail to teach or suggest *all the claim limitations* as set forth in applicants' claims as presently amended.

In particular, as presently amended, applicants' independent claim 1 requires "providing background noise suppression to reduce or substantially eliminate non-speech ambient background noise in high background noise environments where as much as 70 db or greater baseline non-speech ambient background noise may be present, ...". Neither the cited combination of the Makagon et al. and Blum et al. references nor any of the prior art references of record considered alone or together with Makagon et al. or Blum et al. teach or suggest providing background noise suppression that reduce or substantially eliminate non-speech ambient background noise *in high background noise environments where as much as 70 db or greater baseline non-speech ambient background noise may be present.*

In view of the Applicants' forgoing amendments and remarks, it is believed that the application is in condition for allowance. Favorable consideration and prompt allowance of this application are respectfully solicited. If any small matter remains outstanding, the Examiner is encouraged to telephone Applicants' representatives at the telephone number listed below.

Respectfully submitted,

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